



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	----------------------	---------------------	------------------

09/812,134

03/19/2001

Balasubramanian Kalyanasundaram

CIS00-3379

7602

7590

10/19/2004

Barry W. Chapin, Esq.
CHAPIN & HUANG, L.L.C.
Westborough Office Park
1700 West Park Drive
Westborough, MA 01581

EXAMINER

NG, CHRISTINE Y

ART UNIT

PAPER NUMBER

2663

DATE MAILED: 10/19/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/812,134

Applicant(s)

KALYANASUNDARAM ET AL.

Examiner

Christine Ng

Art Unit

2663

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 19 March 2001.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-37 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,3-5,9,16,18-20,24,27,31,33-35 and 37 is/are rejected.
- 7) ☒ Claim(s) 2,6-8,10-15,17,21-23,25,26,28-30,32 and 36 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 19 March 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- 1) ☐ Certified copies of the priority documents have been received.
 - 2) ☐ Certified copies of the priority documents have been received in Application No. _____.
 - 3) ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date <u>11/04/2002</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 112

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claims 9, 24 and 27 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 9 recites the limitation "the peak resource usage" in line 7. There is insufficient antecedent basis for this limitation in the claim.

Claim 24 recites the limitation "the peak resource usage" in line 8. There is insufficient antecedent basis for this limitation in the claim.

Claim 27 is rejected because it is unclear if the new value for a minimum resource setting and the new value for a maximum resource setting are different from those calculated in claim 25.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

4. Claims 1, 3-5, 16, 18-20, 31, 33-35 and 37 are rejected under 35 U.S.C. 102(e) as being anticipated by U.S. Patent No. 6,665,273 to Goguen et al.

Referring to claims 1, 16 and 37, Gorguen et al disclose in Figures 6 and 7 a communications device (router 600) comprising :

[Figure 6] A communications interface (I/O interfaces 618); a memory system (memory unit 614); a processor (processing unit 612); and an interconnection mechanism (bus 616) coupling the communications interface (I/O interfaces 618), the memory system (memory unit 614), and the processor (processing unit 612). Refer to Column 7, lines 16-25.

[Figure 6] Wherein the memory system (memory unit 614) is configured with a resource negotiation application (MPLS 700), that when performed on the processor (processing unit 612), provides the communications device (router 600) with a means for adjusting usage of a resource of a communications channel (tunnel). Refer to Column 7, lines 16-25 and Column 7, line 65 to Column 8, line 1. The memory system (memory unit 614) includes:

[Figure 7] Means (operator or algorithm) for negotiating a current resource setting (bandwidth) for usage of the resource (bandwidth) of the communications channel (tunnel). Refer to Column 8, line 64 to Column 9, line 3 and Figure 8, step 802.

[Figure 7] Means (TE module 710) for performing communications on the communications channel (tunnel) using the resource (bandwidth). Refer to Column 7, lines 40-43 and Figure 8, steps 804-806.

[Figure 7] Means (autobandwidth module 780) for periodically renegotiating a new value for the current resource setting (bandwidth) upon detecting a negotiation event (actual traffic flow compared with current bandwidth) during performance of communications on the communications channel (tunnel) using the resource (bandwidth). Refer to Column 8, lines 32-50 and Figure 8, steps 808-824.

Referring to claim 31, Gorguen et al discloses in Figure 6 a computer program product having a computer-readable medium including a resource negotiation application computer program logic (MPLS 700) encoded thereon for adjusting usage of a resource (bandwidth) of a communications channel (tunnel), such that the computer program logic (MPLS 700), when performed on at least one processor (processing unit 612) within a communications device (router 600), causes the at least one processor (processing unit 612) to perform the operations defined in claims 1, 16 and 37. Refer to Column 7, lines 21-35. Refer to the rejection of claims 1, 16 and 37.

Referring to claims 3, 18 and 33, Goguen et al disclose that the negotiation event (actual traffic flow compared with current bandwidth) indicates:

i) that an actual resource setting (actual traffic flow) of the communications channel (tunnel) substantially equals the current resource setting (bandwidth) for the communications channel (tunnel). "The retrieved peak average byte count is used to compare with the current bandwidth of the tunnel and if an adjustment is required, the autobandwidth module causes the bandwidth to be modified" (Column 8, lines 37-40). Refer to Column 8, lines 52-63.

Referring to claims 4, 19 and 34, Goguen et al disclose that the resource is a bandwidth setting of the communications channel (tunnel) and wherein the negotiation event (actual traffic flow compared with current bandwidth) indicates that a data communications device (router 600) using the bandwidth setting of the communications channel (tunnel) has requested to negotiate a new value for the current resource setting (bandwidth) for the bandwidth setting of the communications channel (tunnel). Refer to Column 6, lines 53-61 and Column 8, lines 32-50.

Referring to claims 5, 20 and 35, Goguen et al discloses in Figure 8 that the step of periodically renegotiating a new value for the current resource setting (bandwidth) upon detecting a negotiation event (actual traffic flow compared with current bandwidth) comprises the steps of:

Detecting a negotiation event (actual traffic flow compared with current bandwidth) related to the resource (bandwidth). Refer to Column 8, lines 32-40 and Figure 8, step 818.

In response to the step of detecting, calculating a new value for the current resource setting (bandwidth) that more closely approximates a value of an actual resource usage of the resource (bandwidth) of the communications channel (tunnel). Refer to Column 8, lines 37-40 and Figure 8, step 820.

Negotiating with a resource allocator (Figure 7, TE module 710) to establish the new value for the current resource setting (bandwidth). Refer to Column 7, lines 40-43; Column 8, lines 41-50; and Figure 8, step 820.

Allowable Subject Matter

5. Claims 2, 6-8, 10-15, 17, 21-23, 25, 26, 28-30, 32 and 36 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

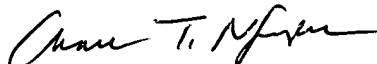
Conclusion

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Christine Ng whose telephone number is (571) 272-3124. The examiner can normally be reached on M-F; 8:00 am - 5:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nguyen Chau can be reached on (571) 272-3126. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

C. Ng
September 23, 2004 *cu*


CHAU NGUYEN
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2600